METHOD AND APPARATUS TO MOVE AN ACCESSOR WITHIN A DATA STORAGE AND RETRIEVAL SYSTEM

Abstract Of The Disclosure

A method to move an accessor capable of accelerating at a_{MAX}. The method calculates a first velocity profile where the accessor travels a distance in the minimum time interval. That first velocity profile requires a first maximum acceleration change. The method calculates a second velocity profile, where that second velocity profile includes a second maximum acceleration change, where that second maximum acceleration change is less than the first maximum acceleration change. The method determines if the accessor reaches a_{MAX} using the second velocity profile. If the accessor does not reach a_{MAX} using the second velocity profile, then the method moves the accessor using the first velocity profile. Alternatively, if the accessor does reach a_{MAX} using the second velocity profile, then the method moves the accessor using the second velocity profile.